



**U.S. Department of Energy**  
**Office of Operating Experience Analysis, EH-33**  
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## **IMPORTANCE OF DOE-WIDE ES&H DATA**

The Department of Energy needs complete, timely, and accurate ES&H data to manage effectively and to fulfill its responsibilities. Like any large industrial organization, we use performance data to ensure efficiency and safety. As a government entity, we have special responsibilities with respect to the Atomic Energy Act, the Occupational Safety and Health Act, the Government Performance and Results Act, Nuclear Safety Rules, and other laws and regulations. The ability to meet these responsibilities and manage our work effectively is dependent on the quality and integrity of available data and the capability to analyze the data from a corporate perspective.

### **Why do we need DOE-wide ES&H data?**

The data that are collected and made available through ES&H Reporting Systems, such as ORPS, the Occurrence Reporting and Processing System, and CAIRS, the Computerized Accident/Incident Reporting System, are invaluable to both field and headquarters as management tools. Such data provide the basic information used for Departmental analysis of performance and complex-wide dissemination of lessons-learned. They serve the field in other ways, as well. For example, 5 of 21 standard performance measures in contracts between DOE and facilities operated by the University of California involve ORPS and/or CAIRS data, and the DOE ES&H Performance Indicators use these corporate systems instead of unique data requests to the field. Department officials frequently use the data to defend programs, refute allegations, and demonstrate safety program effectiveness to critics. Data collected through these systems are valuable only when accepted as standardized, consistent, and complete. Incomplete or erroneous reporting reduces data integrity, jeopardizing the ability to perform authoritative analysis to judge our effectiveness.

### **What EH is doing**

The Office of Environment, Safety and Health (EH) is working to improve its analytic capability, products, and effectiveness. Through re-engineering of ES&H reporting processes, EH will collect more accurate data, reduce demands on line managers by collecting data only once, and gather meaningful normalization data to provide valid analysis over time and across the complex. EH is teaming with other secretarial offices to make the systems work more efficiently as well as teaming across EH to improve products and skills. The result should be better insight into the Department's safety performance and measurable improvements in worker, public, and environmental protection.

### **What Line Managers can do**

Line managers have a stake in developing complete, timely, and accurate ES&H data for managing their own organizations. They can help in generating new and innovative measures of performance that will facilitate safety management in the Department. Their cooperation and assistance is vital in revising and reengineering existing ES&H reporting systems. Finally, their support is essential in maintaining the accuracy and completeness of DOE's ES&H data.

## Current ES&H Datasets and Improvement Plans

**CAIRS**, the Computerized Accident/Incident Reporting System, collects accident information on cases involving occupational injuries and illnesses and property and vehicle damage. The system includes data that is used to generate rates of injury and illness, and property and vehicle loss. In addition to routine data checks that are performed when new data is reported to the system, several measures are underway by independent organizations to verify source information. To help clarify questions regarding recordkeeping and reporting, we provide interpretation assistance through the Response Line and through the on-line Internet access to DOE and OSHA interpretations. Before the end of this year, we plan to conduct a recordkeeping and reporting workshop, which will provide both assistance and information. We anticipate conducting two or three additional workshops at different locations in early 1997. We also provide on-site technical assistance for record keeping and reporting issues through the Office of Worker Health and Safety. (Contact: Janet Macon, EH-51)

**ORPS**, the Occurrence Reporting and Processing System, collects event descriptions, causes, and corrective action data. Changes to ORPS effective last year reduced its impact on Operations Offices and significantly reduced its cost, without reducing its effectiveness. We are now embarking on a broader re-engineering of the occurrence reporting process, with opportunities for further improvements and cost reductions. This spring, we gathered comments and suggestions at most major sites. Currently, the complex-wide Occurrence Reporting and Processing Re-Engineering Task Team is working to develop proposals for short and long term changes. This fall, we will conduct one or two workshops to present these proposals and gather additional ideas for re-engineering. (Contact: Jeannie Boyle, EH-33)

**REMS**, the Radiation Exposure Monitoring System, collects exposure data for DOE radiation workers. Occupational radiation exposure records will soon be centralized at a new location and in a new database to take advantage of current technology and provide better access to exposure information for researchers and the general public. The data will be available in a new *DOE Annual Occupational Radiation Exposure Report, 1992-1994*, a new World Wide Web site, and through the ES&H Technical Information Service (TIS). We want to standardize collection of correlation data such as facility type, worker activities and actual work time in radiation areas. (Contact: Nimi Rao, EH-52)

**Environmental Performance Data** is collected from documents that have been prepared by the Department, in response to statutory and regulatory requirements or environmental program management information needs. Several regulatory reports are routinely provided by field activities to headquarters, where EH compiles them into DOE-wide data (e.g. NESHAPS radioactive air releases; Toxic Release Inventory reports). While such data are generally consistent, they are usually reported within a timeframe that does not allow the Department to take a preventative or proactive position. EH also collects Departmental management data (e.g., ORPS permit violations, releases to the environment, and regulatory findings and notices) from the field. These data are not always accurately and consistently reported. We hope to improve the quality of these data through ORPS re-engineering. There may be other opportunities for performance data (e.g., declining inventories of ozone-depleting substances) that could be important corporate environmental indicators; however, efforts to collect new data that is not mandated by law continues to meet resistance. We hope to improve corporate environmental data by fostering better informational exchanges between headquarters and the field. (Contact: Ray Pelletier, EH-41)